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December 29, 2000

Attorney Docket No.: 55876USA4A (12370-001001)

Box Patent Application

Commissioner for Patents

Washington, DC 20231

Presented for filing is a new original patent application of:

Applicant: Nicholas A. Lee and Gordon G. Wiegand

Title: APPARATUS AND METHOD FOR MAKING TEMPERATURE
COMPENSATED OPTICAL FIBER DIFFRACTION GRATINGS

Enclosed are the following papers, including those required to receive a filing date
under 37 CFR §1.53(b):

	<u>Pages</u>
Specification	11
Claims	4
Abstract	1
Declaration	[To be Filed at a Later Date]
Drawing(s)	6

Enclosures:

— Postcard.

Basic filing fee	\$710
Total claims in excess of 20 times \$18	\$0
Independent claims in excess of 3 times \$80	\$160
Fee for multiple dependent claims	\$0
Total filing fee:	\$870

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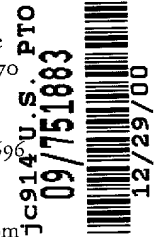
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09751883 12/29/00

Figure 1 consists of three vertically stacked panels, each showing the evolution of the electron-to-proton temperature ratio (T_e/T_p) and the ionization fraction (X_H) as a function of redshift (z). The x-axis for all panels is logarithmic, representing redshift z from 10^0 to 10^7 . The y-axis is also logarithmic, ranging from 10^{-2} to 10^2 .
 - The top panel covers z from 0 to 1000. T_e/T_p (solid line) starts at ~1.1 and decreases to ~0.1. X_H (dashed line) starts at 1.0 and decreases to ~0.1.
 - The middle panel covers z from 1000 to 10^5 . T_e/T_p continues to decrease to ~0.05. X_H decreases to ~0.01.
 - The bottom panel covers z from 10^5 to 10^7 . T_e/T_p reaches ~0.03. X_H reaches ~0.001.
 Labels on the right side of the panels indicate the corresponding T_e/T_p and X_H values for each redshift range.

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A check for the filing fee is enclosed. Please apply any other required fees or any credits to deposit account 06-1050, referencing the attorney docket number shown above.

If this application is found to be incomplete, or if a telephone conference would otherwise be helpful, please call the undersigned at (612) 335-5070.

Kindly acknowledge receipt of this application by returning the enclosed postcard.

Please send all correspondence to:

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Respectfully submitted,


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